REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 6, 7, 16 and 18 have been amended. Claim 6 has been rewritten into independent form. The amendment to claim 6 is supported by the original disclosure, for example by page 28, line 8 of the specification. Claims 6, 7, 16 and 18 have been amended editorially. Claims 1-5, 8-15, 17 and 28 have been canceled without prejudice or disclaimer. Claims 19-27 have been withdrawn. Claims 6-7, 16 and 18 are pending.

Claim Rejections – 35 USC § 112

Claims 1-18 and 28 are rejected for failing to comply with the written description requirement. Claims 1-18 and 28 are rejected for being indefinite. Claim 1-5, 8-15, 17 and 28 have been canceled. Claims 6, 7, 16 and 18 do not recite the terms considered objectionable. Withdrawal of the rejections is requested.

Claim Rejections – 35 USC § 102

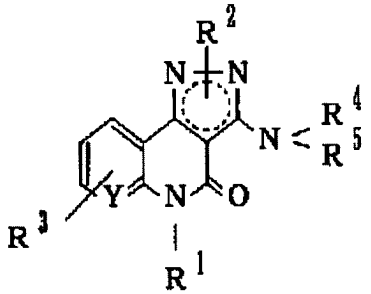
Claim 17 is rejected as being anticipated by Kinji et al. (JP 05-132484) and Cecchi et al. (Farmaco, Edizione Scientifica, Vol. 40, pp. 509-516 (1995)). The rejection is rendered moot, as claim 17 has been canceled. Applicants do not concede the correctness of the rejection.

Claim Rejections – 35 USC § 103

Claims 1-2, 6-13, 15-18 are rejected as being unpatentable over Kinji et al. Applicants respectfully traverse the rejection.

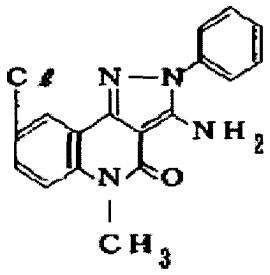
Claim 6 recites a compound having the formula (I). As demonstrated in the present specification, the compound of claim 6 exhibits superior kinase inhibitory activity (see Test Example on pages 275-279 of the present specification).

Kinji teaches compounds with the following core structure as having activities such as anti-inflammatory activity, immunoregulating activity, analgetic activity and antipyretic activity and useful as an immunoregulating agent, antiinflammatory agent, analgetic agent:



where R^1 is a hydrogen, a lower alkyl, a lower alkynyl etc.; R^2 is a hydrogen, a lower alkyl, a phenyl etc.; R^5 is a hydrogen, a lower alkanoyl, an alkylsulfonyl etc.; R^2 and R^4 are combined with each other to form CH_2-CH_2-CO or CH=CH; and Y is CH or N. Kinji specifically indicates that R^3 is hydrogen or halogen (see paragraph [0006]).

In Example 4 in Table 1 of Kinji, R^3 of Kinji's core structure is chlorine. Example 4 has the following structure:



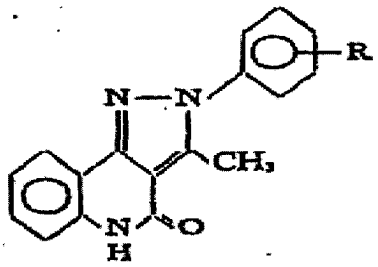
Example 4 corresponds to a compound of the formula (I) of claim 6 where R^1 is phenyl, R^2 is amino, R^5 is chlorine and R^3, R^4 and R^6 are each hydrogen. On the other hand, claim 6 requires R^4 to be (1) an amino group, (2) a hydroxyl group or (3) a group represented by the formula: -X''$(CH_2)_{b''}$-$R^{11''}$, where X'' is –O-, -$NHSO_2$-, -NHCO- or –$NR^{12''}$- (where $R^{12''}$ is a hydrogen atom, or a C_{1-6} alkyl group which may be substituted with a 5- to 8-membered heterocyclic group having 1 to 3 heteroatoms selected from a nitrogen atom, an oxygen atom and a sulfur atom), b'' is an integer from 1 to 4, and $R^{11''}$ is a 5- to 8-membered heterocyclic group which may be substituted with a substituent selected from (a) a hydroxy group, and (b) a C_{1-6} alkyl group, and has 1 to 3 heteroatoms selected from a nitrogen atom, an oxygen atom and a sulfur atom. Nothing in the reference teaches or suggests the features of claim 6.

The rejection contends that the difference between the instant invention and that of Kinji is that the applicant replaces methyl with hydrogen on the quinoline ring N, and that one would have known to make the instant compounds at the time the invention was made. However, Kinji specifically indicates that R^3 in their core structure is hydrogen or halogen. The reference fails to provide any guidance or experimental data to show that changing the core structure of their compounds from having R^3 as hydrogen or halogen to having R^3 as (1) an amino group, (2) a hydroxyl group or (3) a group represented by the formula: -X''$(CH_2)_{b''}$-$R^{11''}$ as recited in claim 6 would not change the intended function of their compounds as an immunoregulating agent, antiinflammatory agent or analgetic agent. Even further, the reference fails to provide any reason to expect that R^3 of their core structure could be changed to (1) an amino group, (2) a

hydroxyl group or (3) a group represented by the formula: -X''$(CH_2)_{b''}$-$R^{11''}$ and achieve the benefits of superior kinase inhibitory activity as shown in the present specification. Accordingly, claim 6 and its dependent claims are patentable over the reference.

Claims 1-4 and 6-18 are rejected as being unpatentable over Cecchi et al. Applicants respectfully traverse the rejection.

Compounds (III a-e) of Cecchi have the following core structure:



(III a-e)

Compounds (III a-e) correspond to compounds of the formula (I) where R^1 is substituted phenyl (substituent is chlorine or methyl), R^2 is methyl, and R^3-R^6 are each hydrogen. On the other hand, claim 6 requires R^4 to be (1) an amino group, (2) a hydroxyl group or (3) a group represented by the formula: -X''$(CH_2)_{b''}$-$R^{11''}$, where X'' is –O-, -$NHSO_2$-, -NHCO- or –$NR^{12''}$- (where $R^{12''}$ is a hydrogen atom, or a C_{1-6} alkyl group which may be substituted with a 5- to 8-membered heterocyclic group having 1 to 3 heteroatoms selected from a nitrogen atom, an oxygen atom and a sulfur atom), b'' is an integer from 1 to 4, and $R^{11''}$ is a 5- to 8-membered heterocyclic group which may be substituted with a substituent selected from (a) a hydroxy group, and (b) a C_{1-6} alkyl group, and has 1 to 3 heteroatoms selected from a nitrogen atom, an oxygen atom and a sulfur atom.

The rejection contends that the difference between the instant invention and that of Cecchi is that the applicant replaces methyl with H at position R^2 of formula (I). However, Cecchi teaches a core structure where the only variable is R, which represents the substituents on the phenyl ring at position R^1 of the formula (I). The reference fails to provide any reason to expect that R^4 could be changed to (1) an amino group, (2) a hydroxyl group or (3) a group represented by the formula: -X''$(CH_2)_{b''}$-$R^{11''}$ and achieve the benefits of superior kinase inhibitory activity as shown in the present specification. Accordingly, claim 6 and its dependent claims are patentable over the reference.

References

Applicants note that US patents corresponding to the two Japanese references, JP 2002-514228 and JP 2000-506537 (US 6,268,391 and US 6,051,577, respectively), were cited in the Information Disclosure Statement that was filed on August 16, 2006. The two Japanese references were cited in the international search report, and thus, should be available to the Examiner. Courtesy copies of the two Japanese references are attached for the Examiner's convenience. Applicants note that "JP 2002-506537" as indicated in the rejection should be "JP 2000-506537". Submission of an Information Disclosure Statement including the two Japanese references will follow the submission of this paper.

In view of the above, favorable reconsideration in the form of a notice of allowance is courteously requested. The Examiner is invited to contact the undersigned at 612.455.3804 if there are any remaining issues.

Respectfully submitted,

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Dated: March 30, 2010

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